Table of Contents

Message from the Dean 1
Selected Faculty Achievements 2
Selected Student and Alumni Achievements 4
Undergraduate and Graduate Education 6
Selected Research Highlights 9
Faculty Recruitment 11
Advancement and Outreach 13
Diversity 14
Engineering Education 15
Innovation and Management 15
Infrastructure Development 16
Inspirational Gifts 17

Inside cover:
In the Renewable Energy and Applied Photonics (REAP) Labs, researchers like Ph.D. candidate Margaret Stevens study how light fundamentally interacts with matter.

On the cover:
As intelligent autonomous robots increasingly become part of our lives, the field of human-robot interaction seeks to understand and improve all aspects of interactions between humans and robots. Tufts now offers Ph.D. and M.S. degrees in the discipline. In the Human-Robot Interaction Lab, Professor Matthias Scheutz and students research affective control and evolution and cognitive robotics for human-robot interaction.

Principal photography:
Anna Miller and Alonso Nichols, Tufts Photography

Note:
All data in this report accurate as of August 2019.
Dean's Message

For the Tufts University School of Engineering, academic year 2018-19 has been one for the record books. This fall, we anticipate meeting the most gender-balanced undergraduate class in the School of Engineering’s history. For the first time ever, more than half of our incoming first-year students will be women. Looking forward to that tremendous milestone doesn’t mean that we will forget to look back. This year, we reflected on a decade of strengthening meaningful participation in science and engineering for all Tufts students, especially those from groups traditionally underrepresented in STEM fields, as the Tufts University Center for STEM Diversity celebrated its tenth anniversary.

The School of Engineering received record numbers of applications to our bachelor’s and master’s programs this year. In the fall, we expect to enroll our largest-ever classes of both undergraduate and M.S. students. We continue to assess how our degree offerings align with industry needs, and we launched one new undergraduate major, two interdisciplinary M.S. programs, and three certificate programs this year. I am excited to watch our programs continue to grow as we provide Jumbos with the tools they need to succeed.

At the heart of it all, Tufts School of Engineering is a learning environment in which people come together to achieve remarkable solutions – an engine for good. This year, I was proud to see all the ways that our students gave back to their communities, from STEM Ambassadors’ and STOMP Fellows’ STEM outreach in local schools to Tufts Girls of Code’s work teaching Medford Girl Scouts how to code and JumboCode’s impressive record of developing technology solutions for nonprofits in need. From delivering passionate community service to incubating innovative start-ups, working in settings that range from athletic championships to classrooms and labs, our students stand out, and so do our faculty.

Faculty members’ ground-breaking research spans our five strategic research areas: energy, water, and the environment; human health and bioengineering; human-technology interface; intelligent systems; and learning science. For the fifth year in a row, the School set a new high record for annual externally-sponsored research expenditures. This year, researchers worked with our local communities to study the efficacy of air filters in public housing near Somerville highways. They developed new methods for the detection of bladder cancer, created bandages that can monitor the condition of wounds, collaborated on mobile sensor networks that could enable researchers to use drones to monitor structural damage following earthquakes, and studied how to help teachers and young students “think like a robot” while learning to code.

In a dynamic time for higher education, I find myself inspired by our students, faculty, staff, and the opportunities ahead. Now is a time for innovation and building connections. The School of Engineering is piloting initiatives like a new cooperative education program for undergraduates, a dual degree program that combines innovation, management, and an engineering discipline of students’ choice, the School’s first fully-online M.S. program, and a bridge program that makes it easier for STEM majors from partner universities to pursue a master’s degree at Tufts — and that’s only the beginning.

Read on to learn more about the past year at Tufts School of Engineering. Visit us in Medford and Somerville, or take a virtual tour of our campus at go.tufts.edu/virtualtour. I look forward to another year of collaboration, scholarship, and discovery.

Sincerely,

Jianmin Qu

Dean, Tufts School of Engineering
Karol Family Professor
This year, Tufts School of Engineering faculty were recognized for their excellence in research and teaching and their singular contributions to their disciplines. Distinguished Professor Maria Flytzani-Stephanopoulos, the Robert and Marcy Haber Endowed Professor in Energy Sustainability, of the Department of Chemical and Biological Engineering (ChBE), was a co-recipient of this year’s American Chemical Society Catalysis Lectureship for the Advancement of Catalytic Science. Bridge Professor Susan Landau of the Department of Computer Science (CS) and The Fletcher School of Law and Diplomacy was inducted into the Information Systems Security Association Hall of Fame.

Faculty continued to lead the way in renewable power and climate research. Professor of the Practice Eric Hines, Professor Daniel Kuchma, and Research Associate Professor Jay Borkland of the Department of Civil and Environmental Engineering (CEE) served as co-authors (and, in Hines’ case, co-editor) of the Partnership for Offshore Wind Energy Research’s collaborative report outlining opportunities and next steps for large-scale research endeavors in offshore wind energy. Assistant Professor Jonathan Lamontagne’s (CEE) research, with Cornell University colleagues, on the narrowing pathways to an acceptable climate future was published in Nature Climate Change and was featured in National Geographic and the Los Angeles Times. Assistant Professor Deborah Sunter of the Department of Mechanical Engineering (ME) published crucial work on racial inequality in the distribution of solar panels (learn more on page 9).

Assistant Professor Srivalleesha Mallidi of the Department of Biomedical Engineering (BME) received a 2019 Early Investigator Award from the International Photodynamic Association. Associate Professor Douglas Matson (ME) was named the next president of the American Society for Gravitational and Space Research.
Professor of the Practice Ronald Lasser of the Department of Electrical and Computer Engineering (ECE) was honored with the Henry and Madeline Fischer Award for Teaching Excellence in the School of Engineering for the third year in a row (and the fourth time in his Tufts career). In 2018 and 2019, Professor of the Practice James Intriligator (ME), Center for Engineering Education and Outreach (CEEO) director Merredith Portsmore, and Lecturer Steven Bell (ECE) each received a Tufts Teaching with Technology Award in recognition of their innovative use of technology in the classroom.

Assistant Professors Ayse Asatekin (ChBE) and Kristen Wendell (ME) both received tenure and were promoted to associate professor. Associate Professor Emmanuel Tzanakakis (ChBE) was promoted to full professor. Provost Nadine Aubry joined Tufts with a tenured appointment as a professor in mechanical engineering. Michael Hughes (CS) was named the Ann W. Lambertus and Peter Lambertus Term Assistant Professor. Amy Pickering (CEE) was named the Tiampo Family Assistant Professor. Incoming faculty member Elaine Schaertl Short was named the Clare Booth Luce Assistant Professor in Computer Science.
Selected Student and Alumni Achievements

Tufts School of Engineering students and alumni are out-of-the-box thinkers, community-minded citizens, and decisive leaders. This year, alumni Andrew Bourhis (ECE), Elizabeth Buechler (ME), Zachary Pagel (CEE), and Brian Rappaport (ECE) and senior Tommy George (ChBE) were named Fellows in the 2019 National Science Foundation Graduate Research Fellowship Program. For the second year in a row, double Jumbo Daniela Torres (ME) received the Best Student Paper Award at the International Microelectronics and Packaging Society New England Chapter Symposium and Expo. Former dean, professor, alumni, and trustee Ioannis Miaoulis (ME) was selected as the next president of Roger Williams University. Student organization Tufts Girls of Code was recognized by the Medford Girl Scouts as an outstanding service partner.

Our well-rounded students continued to rise above the competition both in and out of the classroom. Roger Gu (BME) won Tufts’ first national swimming title since 1982 with a personal-best race in the 50-meter freestyle. Jesse Grupper (ME) placed fifth at the World University Sport Climbing Championship in Bratislava, Slovakia, and nationally-ranked fencer and part-time M.S. student Peter Souders (ME) won a North American Cup title.

Alumni and students also found success in developing their own companies and products. Alumnus Ryan Pandya (ChBE) was named to the 2018 Forbes 30 Under 30 list for social entrepreneurs as the co-founder of Perfect Day, a company that creates animal-free dairy protein. ChBE and BME alumni Sophia Atik, Kelsey-Claire Gallagher, Caitlyn Leo, and Elizabeth Bender’s start-up, VASERA, won the top honor at the Beantown Throwdown start-up competition for university students, where the judges also selected VASERA as the company best positioned for success. At the 2019 $100k New Ventures Competition, two teams of Tufts Gordon Institute (TGI) students won the top prize in their categories.

M.S. student Belinda Xian (CEE) and an intrepid group of Engineering students and faculty ran the 2019 Boston Marathon.
Marine veteran Javier Rincón (BME) and his sister founded a nonprofit called the Welcome Immigrant Network, providing those new to the country with a supportive community.

A number of engineers competed with the women’s crew team at the Head of the Charles Regatta.

Roger Gu (BME) outraced the competition at the 2019 NCAA Division III Swimming and Diving National Championships.

Daniela Torres earned her B.S. and M.S. in mechanical engineering from Tufts and was a two-time Best Paper honoree at the International Microelectronics and Packaging Society New England Chapter Symposium and Expo.
Undergraduate and Graduate Education

In February, the School of Engineering hosted another successful celebration of National Engineers Week. This year, the School of Engineering’s graduate programs office collaborated with the Graduate School of Arts and Sciences to host Women in STEM Lectures with Debbie Martínez, a project manager at NASA, and former astronaut and Johnson Space Center director Ellen Ochoa.

Undergraduate Education: Tufts School of Engineering continues to draw exceptional undergraduate students. There were 4,374 applications this year, which marks a 7% increase over last year’s record high. The acceptance rate was 15.3%. The Class of 2023 is comprised of 51% women (another historic record, marking the first time the School has ever welcomed an engineering class that is more than 50% women), 44% U.S. citizens who are people of color (up from 41% last year), 13% international students, and 17% first-generation college students. This year, the School began offering a new undergraduate major with the launch of a B.S. in Data Science.

Graduate Education: For the second year in a row, Tufts School of Engineering received a record number of master’s program applications and is projected to enroll a historic class of master’s students. M.S. applications were up 44% over 2018, and projected enrollment for the fall of 2019 has increased by 27% over the record enrollment of fall 2018.¹

The School of Engineering launched new graduate degrees in four disciplines this year: an M.S. in offshore wind energy engineering, M.S. and certificates in both computer engineering and in data science, and a certificate in human factors in medical devices and systems. Also this year, the School introduced an M.S. bridge program that offers undergraduate STEM students from key partner institutions an accelerated path into a full-time master’s degree program at Tufts, and a dual degree M.S. program (learn more on page 15).

¹These numbers do not include two Tufts Gordon Institute programs that offer rolling admissions and were still accepting applications as of August 2019. Enrollment in those programs is projected to remain consistent with last year’s enrollment.

Undergraduate Applications

[Graph showing the number of undergraduate applications from 1996 to 2019]
Han Nguyen was one of the first students to participate in the Department of Biomedical Engineering’s pilot cooperative education program, working at Vaxess in the spring of 2019.

Alumnus Keith Moore (ECE) of HP Labs, second from right, delivered the fall Dean’s Lecture on the 3D printing revolution.

NASA project manager Debbie Martinez (pictured) and former astronaut Ellen Ochoa delivered Women in STEM Lectures and shared their experience with students.

At the STEM Ambassadors’ event during Engineers Week, the ambassadors showed their Tufts classmates the hands-on activities they would be conducting in local high school classrooms.

Students in a first-year robotics class engineered toys and made changes based on a testing session and feedback from local children.

Kicking off Engineers Week, Norman Fortenberry of the American Society for Engineering Education gave a Dean’s Lecture on the future of engineering education.

After engineering and building their own instruments in the Musical Instrument Design and Manufacturing course, students demonstrated them in Distler Performance Hall.
## Enrollment and Degrees Awarded

<table>
<thead>
<tr>
<th>Engineering Program</th>
<th>2018-19 Enrollment(^1)</th>
<th>Degrees Granted(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.S.</td>
<td>M.S.</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>—</td>
<td>33</td>
</tr>
<tr>
<td>Biomedical Engineering(^*)</td>
<td>120</td>
<td>26</td>
</tr>
<tr>
<td>Biotechnology Engineering</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Chemical Engineering(^*)</td>
<td>98</td>
<td>8</td>
</tr>
<tr>
<td>Civil Engineering(^*)</td>
<td>59</td>
<td>—</td>
</tr>
<tr>
<td>Civil and Environmental Engineering(^***)</td>
<td>—</td>
<td>18</td>
</tr>
<tr>
<td>Cognitive Science(^**)</td>
<td>—</td>
<td>6</td>
</tr>
<tr>
<td>Computer Engineering(^*)^3</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>Computer Science(^*)</td>
<td>186</td>
<td>59</td>
</tr>
<tr>
<td>Computer Science (from School of Arts and Sciences)</td>
<td>342</td>
<td>—</td>
</tr>
<tr>
<td>Data Science(^3)</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Electrical Engineering(^*)</td>
<td>85</td>
<td>50</td>
</tr>
<tr>
<td>Engineering Management</td>
<td>—</td>
<td>171</td>
</tr>
<tr>
<td>Engineering Physics</td>
<td>8</td>
<td>—</td>
</tr>
<tr>
<td>Engineering Psychology/Human Factors Engineering</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Engineering Science</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Environmental Engineering(^*)</td>
<td>41</td>
<td>—</td>
</tr>
<tr>
<td>Human-Robot Interaction(^**)</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Innovation and Management</td>
<td>—</td>
<td>47</td>
</tr>
<tr>
<td>Materials Science and Engineering(^**)</td>
<td>—</td>
<td>0</td>
</tr>
<tr>
<td>Mechanical Engineering(^*)</td>
<td>222</td>
<td>35</td>
</tr>
<tr>
<td>Engineering(^†)</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>No Major</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Undecided</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>TOTAL (Engineering only):</td>
<td>894</td>
<td>474</td>
</tr>
</tbody>
</table>

*Engineering undergraduate degree programs accredited by the Engineering Accreditation Commission (EAC) or the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET).

** Joint degree program. Students are only counted once for the sake of this chart, but are also assigned to a home department.

*** For B.S. degrees, Civil Engineering and Environmental Engineering are two separate degrees. For graduate degrees, Civil and Environmental Engineering are listed together.

† Includes Civil Engineering degrees in Architectural Studies and Environmental Health

\(^1\) Undergraduate program data circa Spring 2019. Graduate program data circa Fall 2018.

\(^2\) First majors, August 2018 to May 2019. Second majors and minors are not included.

\(^3\) New M.S. program

Students work on projects in the Stricker Family Genius Bar, part of the new Nolop FAST Facility makerspace.
Selected Research Highlights

For the fifth consecutive year, the School of Engineering set a new school record for annual externally-sponsored research expenditures. This year the total exceeded $29.5 million. The faculty submitted 303 proposals, including new and supplemental funding requests. The Tufts Office of Technology Licensing and Industrial Collaboration reported that, for the tenth year in a row, Engineering led all Tufts schools in invention disclosures, accounting for 54% of total university tech transfer activity. The School of Engineering houses particular expertise in five strategic research areas:

**Energy, water, and the environment:** Associate Professor Robert Viesca (CEE) and former postdoctoral researcher Pathikrit Bhattacharya published research in Science that suggests a new link between subsurface injections, a popular practice in oil fracking and wastewaster disposal, and earthquake swarms. Assistant Professor Prashant Deshlahra (ChBE) received a National Science Foundation (NSF) award to reduce the environmental footprint of modern living. His collaborative research project with the University of Connecticut looks at the more efficient use and conversion of fossil fuels into value-added chemicals and materials via catalytic reactions.

**Human health and bioengineering:** Assistant Professor Madeleine Oudin (BME) received a Young Investigator Grant from the Breast Cancer Alliance, supporting her research to expand knowledge of the role of peripheral nerves in breast cancer and how they contribute to cancer progression and metastasis. A team of researchers led by Professor Igor Sokolov (ME), Bernard M. Gordon Senior Faculty Fellow, developed a non-invasive, convenient, and more accurate (compared to the present standard of care) diagnostic method for bladder cancer detection, published in Proceedings of the National Academy of Sciences.

**Human-technology interface:** Professor Sameer Sonkusale (ECE) and collaborators developed a “smart” bandage that can actively monitor and deliver treatment to wounds while keeping caregivers apprised of the patient’s condition. Assistant Professor Deborah Sunter (ME) and colleagues from the University of California at Berkeley found that racial inequity persists in the deployment of rooftop solar panels, with fewer rooftop solar photovoltaics installations in African American and Hispanic-dominant neighborhoods than in white-dominant neighborhoods. The research, published in Nature Sustainability, was featured in news outlets like Forbes, NPR, and Scientific American.
Intelligent systems: Associate Professors Babak Moaveni (CEE), Usman Khan (ECE), and Jason Rife (ME) received an NSF grant to develop a mobile sensor network that can analyze civil infrastructure and characterize structural dynamics. One potential application is enabling flying drones to place sensors, which could rapidly and safely identify damage in a building after an earthquake.

Learning science: Jivko Sinapov (CS), James Schmolze Assistant Professor in Computer Science, was one of a handful of researchers nationwide to receive a Verizon 5G EdTech Challenge Award for a project that will develop a toolkit and framework for robotics, which will help teachers and students “think like a robot” when learning to program. Assistant Professor Kristen Wendell (ME) and colleagues published research in the Journal of Research in Science Teaching on elementary school instructors’ preparation to teach engineering topics.
Faculty Recruitment

Tufts Engineering’s number of tenure-track faculty rose from 87 to 89 this year. Five new tenure-track faculty members, two full-time lecturers, and one visiting assistant professor joined the School in academic year 2018-19. New arrivals in 2019-20 will include:

**Marty Allen**
*Associate Teaching Professor and Director of Online Programs, Computer Science*
Marty Allen joins Tufts from the Department of Computer Science at the University of Wisconsin-La Crosse. His research interests lie in artificial intelligence and theoretical computer science. His recent work includes research on multi-agent learning and applications of simulation and machine learning in biology.

**Felix Huang**
*Lecturer, Mechanical Engineering*
Felix Huang brings to Tufts expertise in human motor learning and control, neuro-rehabilitation with robotics and virtual reality, and surgery skill training and assessment. Previously, he was a research scientist and research assistant professor at the Shirley Ryan AbilityLab and Northwestern University, respectively.

**Hoda Koushyar**
*Lecturer, Mechanical Engineering*
Previously a part-time lecturer in mechanical engineering at Tufts, Hoda Koushyar became a full-time lecturer this year. She has research interests in biomechanics, material characterization, and deformation measurement. She earned her Ph.D. in engineering mechanics from Virginia Tech.

**Raja Sambasivan**
*Assistant Professor, Computer Science*
Raja Sambasivan’s research focuses on building the easily upgradeable or evolvable, multi-party distributed systems needed to support innovation in the cloud ecosystem. He has a particular focus in creating sophisticated diagnosis tools for these systems.

This year, Tufts hosted the inaugural Student Symposium in Cybersecurity and Policy. More than 100 faculty members, students, alumni, staff, and industry partners represented 35 institutions.
Elaine Schaertl Short
Clare Boothe Luce Assistant Professor, Computer Science
Elaine Schaertl Short’s work lies at the intersection of assistive technology and social robotics, developing robots that can support people in achieving their goals. A key focus of her research is understanding the user as embedded within a social and environmental context, and developing algorithms for use in real-world environments.

Richard Townsend
Assistant Teaching Professor, Computer Science
Richard Townsend’s research interests include compilers for embedded systems, functional languages, and program analysis and optimization. He earned his Ph.D., M.Phil., and M.S. in Computer Science from Columbia University.

Matthew Woodward
Assistant Professor, Mechanical Engineering
Matthew Woodward joins Tufts from his position as a guest scientist at the Max Planck Institute for Intelligent Systems. With interests in mechanical engineering, robotics, and biology, he researches morphological intelligence, integrated multi-modal locomotion, and advanced actuation.

Tufts School of Engineering hosted a meeting of Boston-area engineering deans to coordinate and collaborate on engineering education.

Faculty Growth and Composition
Advancement and Outreach

Development: In a testament to the School’s ability to train the next generation of engineering leaders, the School of Engineering raised $20.8 million in fiscal year 2019, far exceeding its goal of $9.5 million. Close to 3,700 donors gave to the school this year, including more than 3,500 individual annual gifts to the Tufts Fund for Engineering, an increase of 166 new donors. Engineering also became the first Tufts school to exceed its Brighter World: The Campaign for Tufts fundraising goal, four years early, with $78 million raised to date to help fund critical education, infrastructure, and research.

Corporate and Foundation Relations: This year, as part of that $20.8 million total, corporate and foundation achievement for the School of Engineering exceeded $4,270,000. The largest awards included an award from the Gates Foundation for Tiampo Family Assistant Professor Amy Pickering (CEE) to study the role of environmental surveillance in monitoring the impact of soil-transmitted helminth control programs, an award from Canon Virginia for Frank C. Doble Professor and Dean of Research Fiorenzo Omenetto’s design of a system for scale-up of silk solution production, and a commitment from the Clare Boothe Luce Program at the Henry Luce Foundation to fund named term professorships supporting women in engineering.

Alumni Outreach: More than 130 alumni, parents, students, and friends – including a number of engineers – gathered in San Francisco for Tufts Amplify, the first-ever Bay Area entrepreneurship and technology summit for Tufts alumni and students. The event was a significant step in establishing a more visible entrepreneurial Tufts alumni community on the west coast. In November 2018, Dean Jianmin Qu, Karol Family Professor, traveled to Hong Kong, Singapore, and Jakarta to meet with alumni and parents, along with hosting alumni events for local Jumbo communities.

Career Center: Tufts Career Center continued to serve an increasing number of engineering students. This year, advisors provided nearly 1,100 consultations to engineering students. Graduate students participated in 315 of those consultations, which represented a 22% increase over last year. Members of the class of 2019 went on to graduate school programs at Harvard University, Vanderbilt University, the University of Southern California, and Tufts, among others, and to positions at companies like Spotify, Goldman Sachs, Amazon, Draper, and Boston Engineering.
Diversity

The Center for STEM Diversity (CSD) celebrated its tenth anniversary this year and continued to support students through its four flagship programs: Bridge to Engineering Success at Tufts (BEST), Redefining the Image of Science and Engineering (RISE), STEM Ambassadors, and the Louis Stokes Alliance for Minority Participation (LSAMP). All five BEST seniors who graduated in May went on to graduate school, and the program welcomed its tenth cohort of scholars during the summer of 2019.

Throughout the year, the RISE program provided 34 students with tailored advising and development opportunities to hone skills for academic success and develop a sense of belonging in STEM environments, with programming in resume building, networking, identity awareness, mentorship, and time management. The STEM Ambassadors program, run in concert with the Jonathan M. Tisch College of Civic Life, trained 14 first-generation college students in leadership, teamwork, social justice, and public speaking. The ambassadors visited 38 local middle school and high school classrooms to lead hands-on activities, give presentations on science and engineering topics, and answer questions about attending college.

Applied Brain and Cognitive Sciences

Hosted at Tufts, the Center for Applied Brain and Cognitive Sciences (CABCS) is a cooperative research initiative between Tufts School of Engineering and the U.S. Army CCDC Soldier Center. The Center’s mission is to bring together a unique interdisciplinary community of scientists and engineers to advance the state of the art in applied brain and cognitive sciences. This year, the CABCS was highlighted at Soldier Technology Day at the Massachusetts State House. Featured research included augmented reality for spatial memory and navigation, neurostimulation for performance enhancement, virtual training tools, a virtual human performance testbed, and innovative human sensing.
Engineering Education

With funding provided by a Tufts Innovates seed grant, the Center for Engineering Education and Outreach (CEEO) continued to collaborate with the Jonathan M. Tisch College of Civic Life on an innovative initiative to equip faculty with tools to infuse civic engagement into engineering curricula. Engineering faculty reported, after the program’s pilot year, that students had reacted positively to the integration of civic engagement into the classroom, and that the professional development offerings had helped faculty feel more prepared. All participating faculty expressed a desire to implement similar activities again.

This year, the CEEO’s outreach activities reached students and teachers across the globe. The Center’s Teacher Design and Engineering Workshops served 920 students in the U.S., Denmark, and Japan. Closer to home, Tufts students participating in the CEEO’s Student Teacher Outreach Mentorship Program (STOMP) provided expert engineering knowledge to 36 teachers and 720 students in K-12 classrooms in the Medford/Somerville area.

Innovation and Management

Tufts Gordon Institute (TGI) completed its global leadership search by naming Professor of the Practice Kevin Oye as its new executive director. A Tufts alumnus and former member of the Engineering Board of Advisors, Oye has been the director of the M.S. in Innovation and Management program since 2015 and served as TGI’s interim executive director during the leadership transition.

This year, TGI and the School of Engineering launched a new dual degree M.S. option, which allows students to complete two M.S. degrees: an M.S. in Innovation and Management, plus an M.S. degree offered by one of the SOE’s six academic departments. Students earn both degrees in an accelerated timeframe and at a reduced cost. The School of Engineering and TGI are launching the School’s first fully-online M.S. program, offering the option of earning an M.S. in Engineering Management online. The program will start welcoming students in January 2020.

In the annual $100k New Ventures Competition, organized by Tufts Gordon Institute and the Tufts Entrepreneurship Center, 18 finalist teams presented their innovative ventures.
Infrastructure Development

Thanks to a generous gift from the Nolop family, the Nolop Fabrication, Analysis, Simulation, and Testing (FAST) Facility, a 5,000-square-foot interdisciplinary makerspace open to the full Tufts community and located in Robinson Hall, was completed in November 2018. Other gifts also supported essential elements, including the Stricker Family Genius Bar, funded by Jane and Rob Stricker, E69, and the Byrne Advanced Machining Area, made possible by Dan Byrne, E76, along with other support for operational and equipment needs.

Construction of a new Tufts building funded by the Cummings Foundation is underway. Located on the corner of Boston and College Avenues, this 148,000-square-foot multifunction building will include medium- and large-sized classrooms, shared interaction and event space, a café, and offices for units including Computer Science and Tufts Gordon Institute.

The Schools of Engineering and Arts and Sciences began the design process to outfit the remaining vivarium shell space in the Science and Engineering Complex, which will consolidate research on the Medford campus and significantly reduce operating costs. Other ongoing infrastructure improvements on campus include the redevelopment of wood frame homes into the Community Housing (CoHo) housing option, and the renovation of Barnum Dana Hall.
Inspirational Gifts

» Eight-figure gift to name a new Tufts building which will house the Department of Computer Science, Tufts Gordon Institute, Tufts Entrepreneurship Center, and the Data Intensive Studies Center (DISC)

» $750,000 to endow a junior faculty professorship from a Tufts Trustee and Engineering Board of Advisors member and his wife, who are parents of a member of the Class of 2022

» $500,000 from a family foundation for term professorships to support women professors in the Departments of Mechanical Engineering, Computer Science, and Electrical and Computer Engineering

» $312,000 in charitable gift annuities to benefit School of Engineering capital needs and projects from a member of the Class of 1956

» $200,000 to support the Tufts Entrepreneurship Center from a member of the Class of 1961 and a member of the Class of 1984

» $100,000 gift to support an endowed scholarship benefiting Engineering undergraduate students from a Board of Advisors member and member of the Class of 1971

» $100,000 gift to support the Ellis Oval Facility Project from a member of the Class of 1984

» $100,000 gift from parents of a member of the Class of 2009 to support the baseball field project

» $75,000 gift to support the purchase of equipment in the Nolop FAST Facility from a corporate partner

» $64,000 gift to support undergraduate financial aid from a member of the Class of 1980